



Program Management Committee

Florida Bay and Adjacent Marine Systems

Science Program

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TO: Marti Allbright, Chair
South Florida Ecosystem Restoration Task Force

THROUGH: Ken Haddad, Chair
Science Coordination Group

FROM: John H. Hunt and Peter B. Ortner, Co-Chairs
Program Management Committee of the Florida Bay and
Adjacent Marine Systems Science Program

SUBJECT: Strategic Science Plan for Florida Bay

The Program Management Committee (PMC) of the Florida Bay and Adjacent Marine Systems (FBAMS) Science Program has recently completed its updated Strategic Science Plan for Florida Bay (attached). Many months of effort have gone into creating what we feel is a comprehensive and technically/scientifically sound document, and we are pleased to present it to you as the Chair of the South Florida Ecosystem Restoration Task Force (SFERTF).

The updated plan clearly articulates science priorities (both restoration modeling needs and other science needs) regarding physical processes, water quality, benthic habitats, higher trophic levels, and the mangrove-estuarine transition zone - a critical research area that has received insufficient attention in the past. These priorities reflect both lessons learned over the preceding decade and advice received from distinguished members of our independent Science Oversight Panel. This updated plan now includes a summary of the state of knowledge regarding Florida Bay (Appendix A), a functional description of the FBAMS Science Program (Appendix B), and references to a myriad of science information products already delivered to the natural resource and restoration management communities.

The PMC will make every effort to address these science priorities but recognizes that it will be difficult, if not impossible, to fully implement the new plan given the present funding climate and constraints upon its

participating agencies. Unless new funds become available we can, at best, support only a limited number of research, monitoring, and modeling projects.

We do, however, offer our program's combined expertise in other ways. For example, the FBAMS science community (through the PMC) has supported the Comprehensive Everglades Plan (CERP) by generating Modeling Terms of Reference, a Standard Data Set, Florida Bay/Florida Keys Feasibility Study (FBFKFS) Performance Measures, and Florida Bay, Southwest Florida Shelf, and Biscayne Bay Interim Goals and Targets. Additionally, scientific information from this program has been used to develop the Southern Estuaries Module of the CERP Monitoring and Assessment Plan (MAP), including the conceptual ecological models for Florida Bay and Biscayne Bay. Further, a subpanel of the PMC developed Biscayne Bay's first science plan which was, subsequently, supplied to the Biscayne Bay Regional Coordination Team and relevant CERP projects.

Many other opportunities exist whereby the FBAMS Science Program can contribute information that can be used to help restoration planners and natural resource managers make sound, scientifically-based decisions. These include making recommendations to participating agencies regarding science priorities, providing peer review of research proposals, facilitating syntheses of scientific information, and providing scientific input and advice to CERP and other South Florida Ecosystem Restoration (SFER) projects within the southern estuaries geographic domain. More specifically, the FBAMS science community (through the PMC) will continue to assist in evaluating and providing the scientific basis for ecological targets and performance measures, facilitate the development of credible predictive tools and measures (e.g., hydrodynamic and water quality models), and interpret the status and trends of the coastal marine ecosystem.

The recent organizational shift of CERP from interagency project development teams to higher level regional teams virtually necessitates continued PMC involvement in implementing CERP. Only through continued PMC participation on ecological and/or other technical subteams of the FBFKFS and related projects like the C-111 Spreader Canal and Biscayne Bay Coastal Wetlands will issues such as model integration remain a priority. Having PMC participation also ensures that scientific input remains a critical component of the adaptive management process.

Finally, with the contacts and relationships that the PMC has already established within the academic scientific community, the PMC can, with suitable support from the implementing agencies, outsource critical research or modeling needs (e.g., bathymetry and flow measurements across mudbanks) and convene scientific workshops focused upon achieving and articulating the scientific community consensus in regard to specific technical issues within the southern estuaries geographic domain (e.g., dissolved organic nitrogen availability).

Given that the PMC has been managing and coordinating science in the coastal marine ecosystem of South Florida for more than a decade since its establishment by the SFERTF's own Working Group, it is our hope and expectation that the Science Coordination Group and the individual SFERTF agencies will continue to make use of the invaluable resources of the Florida Bay and Adjacent Marine Systems Science Program in fulfilling the scientific information needs for their respective projects.

On a related note, a synthesis document on the present state of knowledge of Florida Bay (e.g., driving processes, ecological interactions, and biological responses) and the scientific consensus understanding of the causes of the ecological changes that occurred during the late 1980s and early 1990s will soon be published (February) as a Florida Fish and Wildlife Conservation Commission/Fish and Wildlife Research Institute Technical Report.